Program Description/Textbook or Print Instructional Material

Vendor: Pearson Education, Inc., publishing as Pearson Prentice Hall Web Address: www.phschool.com

Title: **Introduction to Plant & Soil Science & Technology**

Author: Ronald J. Biondo and Jasper S. Lee Copyright: 2003

ISBN: 0-8134-3216-2 Course/Content Area: Plant and Land Science

Intended Grade or Level: 9-12 Readability Level: 9.3 Flesch-Kincaid

List Price: $ 71.96 Lowest Wholesale Price: $ 53.97

Level of Accommodations (Level One, Two, or Three) Three

If Level Two or Three, please provide rationale for not meeting Level One Compliance. Pearson Prentice Hall is unable to provide files in Levels One or Two due to the variety of page layout systems used to create the text. These systems are not compatible with specialized formats such as XML or HTML.

FEATURES

DISCLAIMER: The features of each book or program were developed by the publisher and do not reflect the opinion of the State Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

Content : ***Introduction to Plant & Soil Science & Technology*** effectively introduces students to both plants and soils. It presents the principles influencing plant and soils and the factors that impact soil productivity. The text uses a strong physical science basis in its coverage of soil chemistry and structure.

Student Experiences: ***Introduction to Plant & Soil Science & Technology*** provides excellent direct instruction by organizing chapter content around student learning objectives and important terms that are presented at the beginning of each chapter. Exploring activities at the end of each chapter along with AgriScience and Career Connections throughout are also included to generate reinforcement. Their inclusion allows students to investigate career and leadership opportunities.

Assessment: ***Introduction to Plant & Soil Science & Technology*** offers several ongoing opportunities for student assessments. Chapter-ending questions and activities provide assessment opportunities for student comprehension of the chapter's learning activities. Exploring activities throughout offer additional opportunities for assessment and reinforcement.

Organization: ***Introduction to Plant & Soil Science & Technology*** is organized in five major parts consisting of 23 total chapters. Each chapter is organized around measurable student learning objectives. The content for these learning objectives is presented as major sections in each chapter. The major parts are organized to serve as stand-alone units or as part of a more complete curriculum.

Resource Materials

- **Gratis Items To Be Provided And Under What Conditions**

Free upon request, 1 per teacher user with a minimum purchase of 20 Introduction to Plant & Soil Science & Technology Student Editions:

- Teacher's Manual
- Activity Manual Instructor's Guide

- **Available Ancillary Materials**
  Activity Manual

RESEARCH DATA/EVIDENCE OF EFFECTIVENESS

DISCLAIMER: The research data and evidence of effectiveness was provided by the publisher and does not reflect the opinion of the State Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

Introduction to Plant & Soil Science & Technology has been effectively implemented in a variety of schools across the country. These implementations have led to favorable reports on student performance. The text has been used by the Center for Agricultural and Environmental Research and Training, Inc. in the pre-development of a new Kentucky Core Curriculum for Agricultural Education for tentative release in Summer 2004.

Group V - Career/Technical
Vocational/Practical Living Education
Instructional Materials Evaluation Tool
Agriculture/Production

Title: Introduction to Plant and Soil Science and Technology $53.97	
Publisher: Prentice Hall	
Item Evaluated: Textbook	
Copyright Date: 2003	**Evaluator: DJ Matherly and Pam Zeller**
Content Level: 9-12	**Date of Evaluation 30 July 03**

Level of Alternative Format	Level 1 – Full Compliance	Level 2 – Provisional Compliance	Level 3 – Marginal Compliance

This section completed by Exceptional Children Services

Overall Strengths and/or Weaknesses

Disclaimer: Comments on the strengths and/or weaknesses of each book, material or program were written by members of the State Textbook/Instructional Materials Review Team and reflect their opinions . They do not reflect the opinions of the State Textbook Commission nor the Kentucky Department of Education. In addition, the State Textbook/ Instructional Materials Review Team completed each evaluation form during the week of July 28-Aug. 1, 2003. In order to maintain the integrity of the of the review team's comments, editing was limited to spelling and punctuation.

Recommendations:
☐ **X** Recommended by reviewers to State Textbook Commission
☐ Not recommended by reviewers to State Textbook Commission

Publisher's Explanation of Reviewer's Comments: By action of the State Textbook Commission, publishers are provided limited space, 150 words, to respond to what they may consider factual errors made by the reviewers in the evaluation.

Group V - Career/Technical Vocational/Practical Living Education Instructional Materials Evaluation Tool Agriculture/Production

Title: Introduction to Plant and Soil Science and Technology		**Publisher Prentice Hall**
Technology Management Summary Data:	20 possible points	____0_____ points earned
Technology Management Comments:		
Technology Presentation/Interface Summary Data:	40 possible points	_____0____ points earned
Technology Presentation/Interface Comments:		
Content Summary Data:	52 possible points	_____25_____ points earned
Content Comments:		
Instruction & Management Summary Data	52 possible points	_____50_____points earned
Instruction & Management Comments:		
Organization & Structure Summary Data	36 possible points	_____36_____ points earned
Organization & Structure Comments:		
Resource Material Summary Data	40 possible points	_____36_____points earned
Resource Material Comments:		

Group V - Career /Technical & Vocational/Practical Living
Electronic Instructional Media Review Form
Stand Alone/Independent or Integrated Software for Agriculture/Production

Equipment (circle or change fill color)
Windows
Macintosh
CD-ROM
DVD
Sound
Other

If other, explain

Grade Level (circle or change fill color**)**
Primary
Intermediate
Middle
High

Audience (circle or change fill color)
Individual
Small Group
Large Group

Format (circle or change fill color)
Stand Alone/Independent
Integrated
Supplemental
In lieu of basal test

Cost _____	
_____single copy	_____site license
_____network version	_____school version
____lab pack of ___ copies	_____online

Type of Software: Check all that apply	_____Simulation	_____Management	_____Interdisciplinary	_____Problem Solving	____Tutorial
_____Exploratory	_____Creativity	_____Drill and Practice	_____Critical Thinking	_____Utility	_____Other:

Rating Scale:	3—Some of the time	1—None of the time
4—All or the time	2—Minimally	0— Not applicable

Management	Rating
Allows customizing for individual learning needs.	
Allows students to exit and resume at a later time.	
Keeps a students performance record, where needed.	
Allows control of various aspects of the software (e.g., turning sound off).	
Allows for printed reports.	
Comments:	**Total**

Presentation/Interface	**Rating**
Presents material in an organized manner.	
Has consistent, easy-to-use, on-screen instructions.	
Has developmentally correct presentation format.	
Adapts to different learning environments (learning styles/multiple intelligences, etc.)	
Accessible for special needs students.	
Runs smoothly, without long delays.	
Presents easy-to-view text and graphics.	
Presents easy-to-hear and understand sounds.	
Avoids unnecessary screens, sounds, and graphics.	
Provides immediate, appropriate feedback.	
Comments:	**Total**

Content—Agriculture/Production	Rating
Career Focus/Employability Skills/Workplace Readiness Skills	3
Supervised Agricultural Experience (Work Based Learning)	4
Leadership Development / FFA Student Organization	0
Animal Science	0
Plant & Land Science	4
Agribusiness/Farm Management	4
Sales & Marketing/Planning, Analysis, Strategies, etc.	0
Small Power Equipment/Ag. Power & Machinery	0
Ag. Construction/Ag. Structures & Design	2
Sales & Marketing/Planning, Analysis, Strategies, etc.	0
Technology in Agriculture (Food Animal, Plant, Crop Environmental, Bio-Tech)	**2**
Emerging Agricultural Technologies (GIS, GPS, Tissue Culture, Cloning, etc.	2
Agriscience Principles	4
Comments:	**Total 25**

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable

Instruction and Assessment	Rating
Identifies a Sense of Purpose	4
Builds on Student Ideals	4
Engages Students	4
Develops Production Ideas	4
Promotes Student Thinking	4
Assesses Student Progress	4
Enhances The Learning Environment	4
Reading level is appropriate for interest and ability level of intended student group; level remains consistent throughout.	4
Commonwealth Accountability Testing System (CATS) "like" Assessment is provided	4
Variety of Assessments (diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer performance, portfolio prompts) is included.	4
Includes activities and opportunities for integration of technology.	4
Reflects researched-based practices (e.g. hands-on activities, technology, problem-solving situations)	4
Differentiation techniques and activities suggested.	3
Comments:	**Total 50**

Rating Scale:	3 – Some potential for learning	1 - Not present
4 – High potential for learning	2 – Little potential for learning	0 – Not applicable

Organization and Structure	Rating
Organization is logical and allows for spiraling of content.	4
Vocabulary and key terms are clearly defined and easily accessible within each lesson.	4
Visual illustrations (e.g. graphs, charts, models) and examples are clearly presented and content-related.	4
Illustrations and language reflect diversity (e.g. racial, ethnic, cultural, age, gender, disabilities).	4
Legible type, length of lines, spacing, and page layout and width of margins contribute to overall appearance and use.	4
Student materials seem durable and conducive to daily use.	4
Includes sufficient glossary, index and appendices.	4
Employs accurate grammar and spelling	4
Organization of material can be effectively used with Standards Based Units, Core Content and Program of Studies.	4
Comments:	**Total 36**

Resource Materials	**Rating**
Teacher materials coordinate easily with student materials (e.g. additional resources included at point of need, student pages shown, integration of technology indicated)	3
Activities are included that adapt to the various learning styles, intelligences, and interest/ability levels.	3
Extension activities including adaptations and accommodations for students with special needs.	3
Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections with career and/technology and references (e.g. solution manuals, study guides)	3
Suggestions are made for integration of themes and /or interdisciplinary instruction.	3
Integration opportunities suggested and examples given.	3
Teacher resources are available online.	0
Online resources available – Repeat of information in text.	0
Online resources available – Practice skills only.	0
Online resources available – New application materials.	0
Comments:	**Total 36**

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable